of classifications may limit insight into the diversity of the counties in North Carolina and fail to capture unique economic and socio-economic relationships. For example, it would be incorrect to assume that all counties designated as rural share the same demographic, economic and socio-economic characteristics. Rural counties integrated with a metropolitan area may have very different economic characteristics than those rural counties classified as non-core. There are too many nuances and individual circumstances to broadly define counties.

Dr. Isserman, professor of Urban Planning and Agricultural and Consumer Economics at the University of Illinois at Urbana-Champaign, developed a new methodology incorporating elements of the Census and OMB definitions. Isserman uses the Census population data, but creates more detailed county classifications—rural, urban, mixed rural, and mixed urban—based on population density and distribution.[5] He then combines his four rural-urban county classifications with the OMB integration system,[6] yielding seven categories that consider the urban-rural character of a county and a county's economic integration with a metropolitan or micropolitan area.[7] The new categories are: 1) *rural metro*, 2) *rural micro*, 3) *rural non-core*, 4) *urban metro*, 5) *mixed rural metro*, 6) *mixed rural micro,* and 7) *mixed urban metro (see Table 1 for definitions).* For example, using Isserman's methodology, Chatham County is defined as "rural metro". The county is classified as rural because either 90% of its population resides in a rural area or there is no urban area with a population of 10,000 or more. Chatham County is also classified as metropolitan because OMB has been deemed it economically interdependent with the Raleigh-Durham-Cary Metropolitan Statistical Area.

Table 1 – County Category Definitions

Isserman's Rural-Urban Definitions	OMB's Metropolitan, Micropolitan and Non-Core Definitions
Rural: The county's population density is less than 500 people per square mile, and 90% of the county population is in rural areas or the county has no urban area with a population of 10,000 or more.	**Metro:** County contains Census defined urban area with a population of 50,000 or greater or County is economically interdependent with the county containing the urban area.
	Micro: County contains Census defined urban area with a population between 10,000 < 50,000 or county is economically interdependent with the county containing the urban area.
	Non-Core: Any county not defined as metropolitan or micropolitan.
Urban: The county's population density is at least 500 people per square mile, 90% of the county population lives in urban areas, and the county's population in urbanized areas is at least 50,000 or 90% of the county population.	**Metro:** County contains Census defined urban area with a population of 50,000 or greater or County is economically interdependent with the county containing the urban area.
Mixed Rural: The county meets neither the urban nor rural county criteria, and its population density is less than 320 people per square mile.	**Metro:** County contains Census defined urban area with a population of 50,000 or greater or County is economically interdependent with the county containing the urban area.
	Micro: County contains Census defined urban area with a population between 10,000 < 50,000 or county is economically interdependent with the county containing the urban area.
Mixed Urban: The county meets neither the urban nor rural county criteria, and its population density is at least 320 people per square mile.	**Metro:** County contains Census defined urban area with a population of 50,000 or greater or County is economically interdependent with the county containing the urban area.

Isserman notes that while the Census and OMB definitions attempt to "distinguish urban from rural, and metropolitan from nonmetropolitan, the realities of settlement, commuting, and migration patterns suggest a far more complicated interface in which much mixing occurs among urban and rural populations, and rural areas themselves exhibit a great deal of

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[5] Isserman's four rural-urban categories were created using 2000 Census population data.
[6] This paper utilizes 2003 OMB metropolitan/micropolitan classifications.
[7] Isserman A., et al, 2007; p. 5.